

REMARKS

Reconsideration and allowance of the above-identified application is respectfully requested. Claims 1-5 remain pending.

Claims 1-5 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicants regard as the invention. In particular, the Examiner alleges that the limitation of claim 1, line 10, of “during loading of the sub-deck” and the limitation of claim 5, line 2, of “when the sub-deck is loaded” are inaccurate. The Examiner alleges that these claim features are inaccurate because the sub-deck “is not loaded, [but] rather it moves when a cassette is loaded.” The applicants respectfully disagree, and discuss this rejection in greater detail below.

Claims 1-3 and 5 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. published Patent Application No. 2002/0053620 to Konishi et al. (the Konishi patent application). Further, claim 4 would be allowable if rewritten to over come the rejection under 35 U.S.C. 112, 2nd paragraph, as discussed above. These rejections are respectfully traversed.

Specifically, the Applicants respectfully submits that the Konishi patent application fails to teach or suggest the specific features of the embodiments of the present invention for a pinch roller unit of a magnetic recording/reproducing apparatus.

In particular, the Applicants submit that the Konishi patent application fails to disclose or suggest all of the features recited in independent claim 1, including the feature of a torsion spring that is stressed by being pushed by a sliding member sliding in at least one direction transverse of the main deck, to push the pivoting lever towards the capstan. Rather, the Konishi patent application discloses a twisted coil spring 57 that is

manipulated by a pinch drive arm 97 and pinch press arm 56 to cause a pinch arm 53 to move a pinch roller 55 into contact or towards a capstan 50.

Further, the Konishi patent application fails to disclose or suggest features of certain dependent claims. For example, the Konishi patent application fails to teach that the torsion spring is stressed and released over a predetermined angle by being pushed and released by the sliding member (dependent claim 3).

These rejections will now be discussed in more detail.

The present invention relates to a pinch roller unit of a magnetic recording/reading apparatus that is disposed on a main deck of the magnetic recording/reading apparatus. A head drum and a capstan are disposed on the main deck to move in association with a sub-deck that is disposed to slide on the main deck. The pinch roller unit operates to bring a tape into close contact with the capstan. The pinch roller unit comprises a pivoting lever rotatably disposed on the main deck to pivot towards the capstan in relation to movement of the sub-deck being loaded, a pinch roller rotatably disposed at an end of the pivoting lever and brought into contact with the capstan at the time of loading process, and a torsion spring stressed by being pushed by the sliding member sliding along the left and right directions of the main deck for pushing the pivoting lever towards the capstan. These features are recited in independent claim 1 and their respective dependent claims.

There are two rejections under 35 U.S.C. §112, second paragraph. The first, concerning antecedent basis of “the sliding member” in claim 1, has been overcome with an amendment. In regard to the second rejection under 35 U.S.C. §112, second paragraph, the Applicants respectfully submit that claims 1 and 5 do not need to be amended as the Examiner suggests, as the recited claim features are not inaccurate. The

Examiner contends that “[the phrase] ‘during loading of the sub-deck’ (of claim 1) and ‘when the sub-deck is loaded’ are inaccurate since the sub-deck is not loaded, [but] rather it moves when a cassette is loaded.” According to the M.P.E.P.,

[a] fundamental principle contained in 35 U.S.C. §112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention in essentially whatever terms they choose so long as any meaning assigned to a term is clearly set forth in the specification. . . As noted by the court in *In re Swinehart*, 439 F. 2d 210, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought. M.P.E.P. section 2173.01.

Furthermore, the M.P.E.P. provides a set of factors useful in determining when a finding of indefiniteness is appropriate under 35 U.S.C. §112, second paragraph.

The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. M.P.E.P. section 2173.02.

Careful consideration of all three factors leads to the conclusion that the claims are not indefinite as originally presented. First, the term “loaded” is used to describe the action of the appropriate mechanisms when a cassette is inserted into the machine.

Attention is directed towards the Detailed Description of the Preferred Embodiment section of the specification in paragraphs 18, 23 and 25.

Second, the term “loaded” is also well known and used in other prior art references. For example, in the Background of the Invention section of the specification, the term “loaded” is used when describing the moving and supporting of a tape when it is wound around a head drum. See paragraphs 4 and 7 of the specification. Furthermore, the Konishi patent application also uses the terms “loaded” and “unloaded” to describe certain operating modes of the magnetic recording/reproducing apparatus. Finally, it is apparent that, given the common usage of the terms “loaded” and “unloaded” and their use in the cited prior art reference of the Konishi patent application, one skilled in the art of the invention would, with a reasonable degree of clarity and particularity, know that the claims set out and circumscribe a particular subject matter. For all these reasons, therefore, the Applicants respectfully request that the rejection under 35 U.S.C. §112, second paragraph of claims 1-5 be withdrawn.

Turning now to the §102 rejection, the Konishi patent application discloses a magnetic recording/reproduction apparatus for winding a magnetic tape around a rotary head cylinder, having a rotary head, for a predetermined arc, for recording/reproducing the magnetic tape. The magnetic recording/reproduction apparatus includes a capstan shaft for driving the magnetic tape and a pinch roller for pressing the magnetic tape against the capstan shaft. When the magnetic tape is being reproduced, the capstan shaft is rotated in a forward direction with the pinch roller pressing the magnetic tape against the capstan shaft. When a pause operation of pausing the reproduction of the magnetic tape is performed, a tension acting upon the magnetic tape is reduced.

The Office Action cites the device of the Konishi patent application as including “a pivoting lever 53 having a pinch roller 55 rotatably supported thereon that is adapted to

be brought into engagement with the capstan 50 during loading movement of sub-deck 3, a torsion spring 57 coaxially connected with the pivoting lever 53 and functioning in a manner as claimed, and wherein the sub-deck 3 pushes against a protrusion 59 on the lever 53 during loading movement of the sub-deck 3, as recited in claim 5". Respectfully, the Applicants disagree with the Examiner's characterization that the combination of components summarized above by the Examiner functions "in a manner as claimed" and that all of the features of Applicants' independent claim 1 are present in Konishi patent application.

It is well known that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051 1053 (Fed. Cir. 1987). Respectfully, the Applicants submit that not each and every claim feature of independent claim 1 is present in the Konishi patent application. Claim 1 includes the claim feature of "*a torsion spring that is stressed by being pushed by the sliding member sliding in at least one direction transverse of the main deck, to push the pivoting lever towards the capstan.*" Referring to the Konishi patent application, it can be found that the twisted coil spring 57 operates in a different manner as a result of fundamental differences between the two apparatus. Paragraph 160, repeated below, describes operation of the twisted coil spring 57 in the Konishi patent application:

Referring to FIG. 34, in the play mode, *the pinch drive arm 97 is pivoted in the clockwise direction by the pinch cam gear 95, and a pressing cam portion 281 on the pinch drive arm 97 presses the roller 152 axially supported on the pinch press arm 56, whereby the twisted coil spring 57 presses the pinch roller 55 onto the capstan 50 via the tape 2.* Thus, the tape 2 is driven by the rotation of the capstan 50. The Konishi patent application, paragraph 160 (emphasis added).

As recited in claim 1, a torsion spring, which is exemplified by torsion spring 75, is “stressed by being pushed by a sliding member sliding in at least one direction transverse of the main deck, to push the pivoting lever towards the capstan”. This is not the case in regard to the twisted coil spring 57 of the Konishi patent application. Instead, the twisted coil spring 57 does not touch any sliding member, nor even the pinch drive arm 97 (which *rotates* in a clockwise direction, and does not move transversely) that acts upon the roller 152 that is attached to pinch press arm 56. Subsequently, it can also be appreciated that there is no “sliding member” as claimed in claim 1 of the present invention disclosed in the Konishi patent application. Therefore, it is respectfully requested that because the Konishi patent application lacks both the sliding member and torsion spring features of independent claim 1, the Konishi patent application cannot anticipate the claim and the rejection must therefore be withdrawn.

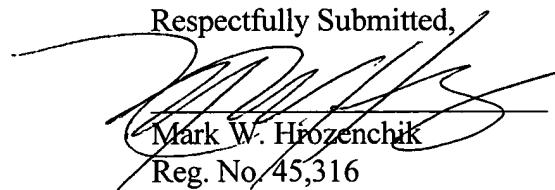
In regard to dependent claim 3, the Examiner alleges that the twisted coil spring 57 of the Konishi patent application is identical to the torsion spring 75 of the present invention. The Applicants respectfully disagree. It has been shown above that the twisted coil spring 57 of the Konishi patent application does not touch any sliding member, because none exists in the Konishi patent application. Further, if it could be construed that the pinch drive arm 97 of the Konishi patent application somehow is equivalent to the Applicants’ sliding member 43 (an assertion that the Applicants respectfully suggest would also be in error), it still cannot be suggested that the two components (i.e., Applicants’ recited torsion spring and Konishi’s twisted coil spring 57) are equivalent because, in the Konishi patent application, the twisted coil spring 57 does not even touch the pinch drive arm 97. Instead, as Fig. 34 of the Konishi patent application makes clear, the pinch drive arm 97, which *rotates* in a clockwise direction, acts upon roller 152 that is attached to pinch press arm 56 that acts upon the twisted coil spring 57 to force the pinch roller 55 against the capstan 50. This is completely different from the Applicants’ invention and from what is recited in dependent claim 3.

For all these reasons, therefore, it is respectfully requested that the rejection of claims 1-3 and 5 under 35 U.S.C. §102(b) be withdrawn. The Applicants are grateful to the Examiner for finding claim 4 allowable.

The amendments to paragraphs 4, 7, 18, 23 and 26 correct minor errors in the specification. The amendment to paragraph 25, support for which can be found in Figs. 2 and 3, and paragraphs 18 and 23, further clarifies the scope of the Applicants' invention. No new matter has been added. Should the Examiner have any questions, kindly contact the undersigned at the number indicated below.

In view of the above, it is believed that the application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Respectfully Submitted,



Mark W. Hrozenchik

Reg. No. 45,316

Roylance, Abrams, Berdo & Goodman
1300 19th Street, Washington DC 20036
Dated: November 23, 2004